



UNITED STATES PATENT AND TRADEMARK OFFICE


UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,444	02/10/2004	Thomas A. Berson	(P0230S-02) TYHC:0053-2/F	3698
52144 7590 02/12/2007 FLETCHER YODER (TYCO INTERNATIONAL, LTD.) P.O. BOX 692289 HOUSTON, TX 77269-2289			EXAMINER WINAKUR, ERIC FRANK	
			ART UNIT	PAPER NUMBER
			3768	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/776,444	Applicant(s)  BERSON ET AL.	
	Examiner Eric F. Winakur	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 3, 5 - 7, 9 - 12, and 15 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over von der Ruhr et al. in view of Osborn. von der Ruhr et al. teach a medical device (including a pulse oximeter; column 3, lines 45 - 51; column 7, line 66 - column 8, line 9) that includes a digital memory configured to provide a security function for identifying the device and preventing tampering with memory related to the medical device. von der Ruhr et al. teach that the security function can be implemented in a variety of manners and can include encryption keys, signatures of data, cyclical redundancy checks (column 2, lines 11 - 56; column 3, line 45 - column 5, line 40). Further, von der Ruhr et al. teach that the monitoring system includes elements to read and verify the security information and that the memory may be included in a connector portion to limit the overall size of the probe (column 8, lines 10 - 17). Thus, von der Ruhr et al. teach all of the features of the claimed invention except they do not particularly teach that this is implemented with a digital signature. Osborn teach an arrangement for preventing electronic memory tampering that is useful in medical instrument operation (column 1, lines 9 - 16) that includes use of digital signatures to protect sensitive data from unauthorized access. It would have been obvious to one of

Art Unit: 3768

ordinary skill in the art at the time of the invention to modify von der Ruhr et al. to use a digital signature, as taught by Osborn, since von der Ruhr et al. indicate that digital security features should be included in a medical device and Osborn teach that use of a digital signature in a medical device provides these functions.

3. Claims 4, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over von der Ruhr et al. in view of Osborn as applied to claims 1, 5, and 9 above, and further in view of Quinn et al. The combination teaches all of the features of the claimed invention except that a portion of the digital data is imbedded in the digital signature. Quinn et al. teach an alternate medical device that incorporates security features for data stored in the sensor memory that includes encoding portions of the data for added protection of the data (column 11, line 66 - column 12, line 55). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to encrypt a portion of the data in the signature, as taught by Quinn et al. since this provides additional protection of the data.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over von der Ruhr et al. in view of Osborn as applied to claim 9 above. The combination teaches that a variety of digital signature algorithms can be employed (see Osborn, column 13, line 34; column 14, lines 29 - 31) but do not particularly disclose use of Rabin-Williams signature. However, this is merely an additional known digital signature algorithm. Without a showing of unexpected results or criticality, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the combination with

Rabin-Williams signature, since it has generally been held to be within the skill level of the art to substitute alternate equivalent expedients.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over von der Ruhr et al. in view of Osborn as applied to claim 19 above, and further in view of Ali et al. The combination teaches all of the features of the claimed invention except an internal monitor and conditioning circuit are contained in the adapter. Ali et al. Figure 3 and the description thereof, teach an adapter that includes an internal pulse oximeter and waveform generator to allow an older external oximeter to calculate a saturation generally equivalent to that calculated by the superior internal oximeter. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to include an internal monitor and conditioning circuit, as taught by Ali et al. since this allows an older monitor to calculate a saturation generally equivalent to that calculated by a superior oximeter.

Response to Arguments

6. Applicant's arguments with respect to claims 1 - 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F. Winakur whose telephone number is 571/272-4736. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571/272-4740. The fax phone

Art Unit: 3768

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eric F Winakur
Primary Examiner
Art Unit 3768